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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,144	12/27/2000	Ronald Martin Horn	1585-257	3292

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EXAMINER

HARTMAN JR, RONALD D

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/748,144

Applicant(s)

HORN ET AL.

Examiner

Ronald D. Hartman Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is in reply to the Appeal Brief filed on 3/7/2005.
2. Claims 1-2 and 4-6 are presented for further examination.

### ***Response to Arguments***

3. In view of the Appeal Brief filed on 3/7/2005, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claim 6, a feature wherein ONLY water chemistry is utilized is not a feature which was adequately disclosed by the specification as originally filed, and

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therefore the inclusion of this feature appear to represent new matter. Nowhere does the applicant's disclose that water chemistry is the ONLY data being utilized when predicting the growth rate of cracks in a nuclear reactor. The applicant's attention is directed to page 7, lines 16-22 in which water chemistry, in addition to several other characteristics, are used for determining cracks behavior. Nowhere is there disclosure that water chemistry is the ONLY input.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al., U.S. Patent No. 5,817,958, in view of Reid et al., U.S. Patent No. 6,298,308.

As per claims 1 and 4-6, Uchida teaches a method comprising:

- receiving input water chemistry characteristics over a global computer network (e.g. Figure 14 element 49; "Water Chemistry", element 51; "Plant Parameters" and C19 L19-38; "The place where the residual life evaluating system is installed is not limited to a central control room of the plant. ... Therefore, the system may be installed in another plant facility);
- accessing a crack growth behavior model that predicts component crack behavior according to the input water chemistry characteristics; (e.g. C6 L56-65; "When the plant ... analysis of the plant chart, and evaluation base on the prediction models, ... to take systematic actions; and Figure 14 elements 11 and 55); and
- outputting a crack growth prediction profile according to an analysis of the crack growth behavior model (e.g. Figure 14 element 48 and element OUTPUT: and C12 L26-55, "Supplied to the plant chart are record information ... provide security

program information.) by outputting a real time crack growth prediction according to the input water chemistry characteristics. (i.e. the disclosed system and method of Uchida et al has the capability of performing this function since data about the crack is used to determine the residual life of the system, See Figure 14 element 55 and C12 L42-55, and it is noted that "real time" is interpreted to involve a delay and thus Uchida anticipates this feature since a delay must be present in any controlled system).

As per claims 1 and 5-6, Uchida does not specifically teach utilizing a global computer network, in other words the Internet, for transmitting data regarding the operations or maintenance needs of plant equipment.

Reid et al. discloses utilizing Internet communications so as to allow a central monitoring site the ability to diagnose the operations of plant equipment that is remotely located to the central monitoring site (e.g. C4 L53-56, C7 L28-39 and C7 L50-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Reid into Uchida for the purpose of allowing data about the plant to be transmitted to a remote location for further analysis so as to allow skilled technicians, which may or may not be present at the site where the plant is located, to accurately and effectively analyze the data in order to determine what, if any, corrective actions should be taken, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

As per claim 4, although Uchida does not specifically teach the use of a server running a server program, this feature is believed to be the functional equivalent of utilizing a computer for accomplishing a set of computer related tasks executed on the computer system itself, and as such, the server and the server program represents features that are an obvious variation of Uchida since Uchida clearly discloses the use of a computer system for accomplishing the system as disclosed, and since a server is merely a dedicated computer system utilized for accomplishing specific computing tasks, both features which are clearly disclosed by Uchida.

As per claim 2, Uchida teaches generating a graphical representation of a crack growth according to the input water characteristics (e.g. Figure 14 element 48a and C17 L13-27; "The evaluation result is indicated on the display screen... is quantitated depending on the personality of the plant.).

As per claim 6, although Uchida combined system (Uchida in view of Reid) does not specifically disclose that only water chemistry data is utilized in making crack growth rate predictions, it is a feature that is obvious over the combined system of Uchida since clearly if a system is capable of utilizing several different types of data in order to obtain an accurate solution to a problem, then the same system would possess the capability of performing this solution using a subset of the different types of data, and the size of the subset appears to be of little patentable significance. That being said, a feature whereby only water chemistry data is used for determining crack growth rate predictions appears to be a capability that the combined system of Uchida would possess the ability to perform, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D Hartman Jr. whose telephone number is (571) 272 - 3684. The examiner can normally be reached on Mon. - Fri., 11:30 am - 8:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached at (571) 272 - 3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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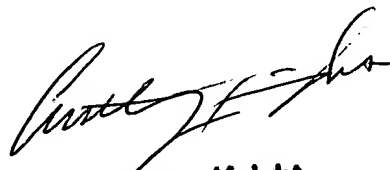
you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald D Hartman Jr.

Patent Examiner

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A handwritten signature in black ink, appearing to read "Anthony Knight", is written over the printed name.

**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**